

PROPOSED USE OF THE PLENARY POWERS TO DESIGNATE AS THE TYPE SPECIES OF THE GENUS "MORTONELLA" POMEL, 1883 (CLASS ECHINOIDEA), A GENUS BASED UPON A MISIDENTIFIED TYPE SPECIES, THE SPECIES INTENDED AS SUCH BY THE ORIGINAL AUTHOR

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1. The purpose of the present application is to ask the International Commission on Zoological Nomenclature to use its plenary powers, under the procedure laid down by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* **4**: 158-159), for the purpose of designating, as the type species of the genus *Mortonella* Pomel, 1883 (Class Echinoidea), a genus based upon a misidentified type species, the species intended to be the type species by the original author of the genus. A decision on this case is urgently required in connection with the preparation of the forthcoming *Treatise on Invertebrate Paleontology*, and it is particularly hoped, therefore, that the International Commission will give all practicable priority to the consideration of this case.

2. The facts of this case are as follows. In 1858 (*Syn. Echin. foss.* : 23) Desor established a new nominal genus to which he gave the name *Mortonia*. Desor placed in this genus one species only, which is, therefore, the type species by monotypy. That species was cited by Desor as *Mortonia rogersi* Morton (= *Scutella rogersi* Morton, 1834, *Syn. organ. Remains cret.* : 77, pl. 13, fig. 3). It is perfectly clear that the species to which Desor applied the above name was not the true *Scutella rogersi* Morton, 1834, but the quite distinct species *Scutella quinquefaria* Say, 1825 (*J. Acad. nat. Sci. Philad.* (1) **5** : 228), which already in 1841 (*Mon. echinoid.*, Sec. Mon. des Scutelles : 85, pl. 19a, figs. 1-4) had been misidentified by Agassiz with Morton's *Scutella rogersi*. That the same misidentification was made by Desor in 1858 is clear (a) from the diagnosis (reading in part "sillons ambulacraires de la face inférieure anastomosés deux fois"—, (b) from his reference to Agassiz's figures, and (c) from his description (reading in part "cinq tubes buccaux venant s'ouvrir sur le pourtout du peristome") which he gave for the single included species, a description which is appropriate for *Scutella quinquefaria* Say but is quite unsuitable for *Scutella rogersi* Morton, which has unbranched ambulacral food grooves and no apparent buccal tubes.

3. In 1883 (*Class. méth. gén. Échin. viv. foss.* : 70) Pomel recognised that the name *Mortonia* Desor, 1858, was invalid, it being a junior homonym of *Mortonia* Gray [1851] (*Proc. zool. Sec. Lond.* **19** : 38), and he accordingly gave to Desor's *Mortonia* the new name *Mortonella*.

4. Clark and Twitchell (1915, *U.S. Geol. Survey, Mon.* **54** : 136-138) were the first authors to recognise that two species had hitherto been confused under the name "*Scutella rogersi* Morton." They accordingly separated these two species in their monograph, placing the species which Agassiz (1841) and Desor (1858) had misidentified as *Scutella rogersi* Morton in the genus *Mortonella* Pomel, and the true *Scutella rogersi* Morton in the genus *Clypeaster* Berthold, 1827.
5. All systematists who have recognised the genus *Mortonella* Pomel (*Mortonia* Desor) have treated it in the sense of Desor, that is, as a genus having as its type species the species for which the proper name is *Scutella quinquefaria* Say, 1825.
6. If it were necessary under the *Règles* to assume that Desor's determination of *Scutella rogersi* Morton was correct, the genus *Mortonella* Pomel, auct. would be left without a name, while the name *Mortonella* Pomel (*Mortonia* Desor) would be applicable to a clypeastroid echinoid, in a sense in which is has never been used by any systematist. Such action would run directly counter to Desor's intentions and would be open to the strongest objection, in that it would involve the acceptance as the type species of this genus of a species agreeing neither with the original generic diagnosis nor with Desor's description of the sole species included by him in the genus.
7. The generic name *Mortonella* Pomel (*Mortonia* Desor) has been widely used by systematists (see Mortensen, 1948, *Mon. Echinoidea* **4**(2) : 391) who have considered the Tertiary echinoids of the South-eastern United States, for the species figured (incorrectly) by Agassiz (1841) as *Scutella rogersi* Morton and its relatives, and it has never been used in any other sense. Consequently, confusion rather than uniformity would result if it were now necessary to assume that Desor correctly identified Morton's species.
8. The International Commission on Zoological Nomenclature is therefore now asked :—
- (1) under the procedure prescribed by the Thirteenth International Congress of Zoology for determining the type species of a genus based upon a misidentified type species, to use its plenary powers (a) to set aside all designations or selections of type species for the genus *Mortonella* Pomel, 1883, made prior to the proposed decision, and (b) to designate *Scutella quinquefaria* Say, 1825, to be the type species of the foregoing genus ;
 - (2) to place the generic name *Mortonella* Pomel, 1883 (gender of generic name : feminine) (type species, as proposed in (1) above to be designated under the plenary powers : *Scutella quinquefaria* Say, 1825) on the *Official List of Generic Names in Zoology* ;
 - (3) to place the trivial name *quinquefaria* Say, 1825 (as published in the combination *Scutella quinquefaria*) on the *Official List of Specific Trivial Names in Zoology* ;
 - (4) to place the generic name *Mortonia* Desor, 1858 (a junior homonym of *Mortonia* Gray [1852], on the *Official Index of Rejected and Invalid Generic Names in Zoology*.